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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,501	07/05/2006	Jean-Christophe Giron	283486US0PCT	9280
22850	7590	05/09/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NELSON, MICHAEL B	
			ART UNIT	PAPER NUMBER
			4145	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/564,501	Applicant(s) GIRON ET AL.	
	Examiner MICHAEL B. NELSON	Art Unit 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18,21 and 22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/29/06; 01/13/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. Regarding the IDS filed on 3/29/06, certain referenced were disclosed twice and were considered in the first instance but not in the second instance.

Specification

2. The use of the trademarks has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recited "margin line" lacks adequate description in the instant specification. Page 11 of the instant specification indicates a surface ablation operation being carried out by a laser margining technique but does not mention a margining line. For the purposes of advancing prosecution, the margining line will be taken as any portion of the substrate along a line of the periphery (i.e. along the margins of the substrate).

6. Claims 1-18, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "succession" is recited. This phrase is vague and indefinite in that it is unclear if the bulleted limitations that follow the phrase are meant to be assembled in the order they are listed or in the order as specified in the limitations themselves (i.e. with the active layer and polymer layer in between the two glass substrates). For the purposes of advancing prosecution, the phrase in question will be taken as limiting the layers of the assembly to the order as specified in the limitations themselves (i.e. with the active layer and polymer layer in between the two glass substrates).

Regarding claim 16, the phrase "seals are penetrated by connection elements of the active system at least partly comprise mechanical reinforcement elements" is recited. This phrase is vague and indefinite in that it is unclear whether the seals or the connection elements are meant to comprise mechanical reinforcement elements. For the purposes of advancing prosecution, the phrase in question will be taken as "seals are penetrated by connection elements of the active

system **and** at least partly comprise mechanical reinforcement elements" (i.e. the seals are meant to have mechanical reinforcement elements in addition to connection elements).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-11, 15-18, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Giron et al. (WO/2002/006889), see English language equivalent Giron et al. (U.S. 2004/0053125).

Regarding claim 1, Giron et al. discloses a glazing assembly, comprising in succession:

- a first rigid substrate (S1); a second rigid substrate (S2);
- at least one active system (3) comprising a multilayer, comprising at least one thin film and placed between the substrates (S1 and S2); and
- at least one polymer film (f1), the said at least one polymer film being placed between the substrate (S1) and the substrate (S2); characterized in that wherein the active system (3) is on the inner face (2) of the substrate (S1).

(See [0020]-[0024], the two rigid substrates have active layers (i.e. electrochromic system layers) and a protective polymer layer in between them. Part of the active electrochromic system layers are on either substrate (i.e. inner and outer).)

While Giron et al. does not explicitly disclose that the polymer layer functions to retain fragments of the glazing assembly should the assembly break, in light of the substantially identical polymer layer thickness and composition (i.e. polyurethane ([0024]) 0.8 mm thick ([0091])) with the instant disclosed polymer layer, (See instant specification, page 9, lines 1-5), it will, inherently, possess the claimed properties, absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).

Regarding claims 2, 3, 9 and 10, Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly

- in that wherein the active system comprises an electrically controllable system comprising variable optical properties, variable energy properties, or a combination thereof, wherein the electrically controllable system is at least one system selected from the group consisting of an electrochromic system, an optical valve, a viologen-based system, a liquid-crystal system and an electroluminescent system.
- wherein the active system comprises a thin film or a thin-film multilayer with a thermal function, of the low-emissivity or solar-protection type, an acoustic function, of the acoustic attenuation coating type, or an optical function, of the decorative or absorbent, thermochromic or thermotropic type.
- wherein the glazing assembly further comprises an opacifying peripheral coating, wherein the opacifying peripheral coating is of the screen-printed type, and wherein the opacifying peripheral coating is applied to at least one part of the glazing assembly selected from the group consisting of around the periphery of face (2) on the substrate (S1) around the

periphery of face (3) on the substrate (S2), and around the periphery of face (4) on the substrate (S2).

- wherein the glazing assembly further comprises at least one margining line is positioned on the periphery of the face (2) located on the substrate (S1), on the periphery of the face (3) located on the substrate (S2), or a combination thereof.

(See Abstract, the active system in the assembly is electrochromic, which provides and optical function. See [0124], the screen-printing of conductive strips in place of the wires which lie along the periphery of the substrates (Fig. 7, 14a-c, 15a-c) is disclosed. These conductive strips would alter the opacity of the substrate to some degree and therefore would constitute an opacifying coating. See [0040]-[0046], the deactivated lower electroconductive layer along the periphery of the substrate, (deactivated via localized ablation, [0046]), constitutes a margining line.)

Regarding claims 4-8, 21 and 22, Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly

- wherein the substrates (S1) and (S2) are made of glass.
- wherein the total thickness (e1+2) of the substrates (S1) and (S2) and of all the materials placed between them is less than or equal to 8 mm
- wherein the total thickness (e1+2) of the substrates (S1) and (S2) and of all the materials placed between them is less than or equal to 30 mm
- wherein the substrates (S1) and (S2) have substantially identical shapes and substantially identical dimensions.

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- wherein the substrates (S1) and (S2) have different dimensions and substantially identical shapes.
- wherein the glazing assembly comprises at least one transparent substrate of polygonal shape, wherein the at least one transparent substrate comprises at least one property selected from the group consisting of flat, curved, partially curved, clear and bulk-tinted.
- wherein the glazing assembly comprises an opaque, opacified or mirror substrate.

(See [0091]-[0092], the two substrates are of glass about 2mm thick each, and the plastic layer is 0.8mm thick, which makes a total thickness of 2.8mm thick. The other layers deposited in the assembly have a maximum disclosed total thickness of 1340 nm or 0.00134mm (i.e. $20+350+100+100+100+370+300$ nm), making the total assembly thickness 2.80134mm, which lies within the ranges of instant claims 5 and 6. The two glass substrates are about 2mm thick each, which makes them substantially the same dimension and they have identical rectangular shapes, while in Fig. 4 ([0107]), one glass pane is smaller than the other, giving it the same shape with different dimensions. See [0070], the glass substrates are disclosed as being bulk tinted, which gives them a degree of opacity and therefore makes them opacified substrates.)

Regarding claims 11, 15 and 16, Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly

- wherein the glazing assembly further comprises a first peripheral seal in contact with the facing faces of the substrates.

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- wherein the first peripheral seal, the second peripheral seal, or the first and the second peripheral seal, at least partly fill an open peripheral groove defined by a recess between the two substrates.
- wherein the first peripheral seal, the second peripheral seal, or the first and second peripheral seals are and/or second peripheral seal is penetrated by connection elements of the active system at least partly comprise mechanical reinforcement elements, or a combination thereof.

(See [0069]-[0070], an insulating polymer film frame is disclosed to lie around the periphery of the substrates as a seal, with two of its sides having flexible conductive current leads or conductive coatings which serve as connection elements for the active system within the frame and also provide a degree of mechanical reinforcement for the polymer seal. Also, the polymer film frame is positioned on, and at least partially fills, the marginal deactivated areas, which, being deactivate via ablation, constitute open groove spaces between the two substrates.)

Regarding claim 17, Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a method of forming an article comprising, forming an article with a glazing assembly; wherein the article is selected from the group consisting of a window, a sunroof, a skylight, a display panel, a display case, and a piece of furniture.

(See [0080]-[0092], the method for making assembly is disclosed. See [0074], an embodiment of the assembly in an automobile roof (i.e. sunroof) is disclosed.)

Regarding claim 18, Giron et al. discloses all of the claimed limitations as set forth above.

Giron et al. does not explicitly disclose the specific passing of the safety tests of the ECE R43 and ANSI Z26.1 standards for the glazing assembly. However, in light of the substantially identical glass substrate thickness, polymer layer composition and thickness and the substantially identical sealants in the glazing assembly of Giron et al. with the instant glazing assembly, it will, inherently, possess the claimed properties, absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giron et al. (WO/2002/006889) as applied to claims 1 and 11 above, and further in view of Johnson et al. (U.S. 6,284,360).

Regarding claims 12-14, Giron et al. discloses all of the claimed limitations as set forth above. Additionally the reference discloses a glazing assembly used in an embodiment for a vehicle sun roof, ([0074]), which would require a secondary frame seal to mount the assembly into the vehicle.

Giron et al. does not disclose a glazing assembly

- wherein the glazing assembly further comprises a second peripheral seal in contact with the edges of the substrates.
- wherein the first and second peripheral seals are obtained formed by extrusion or obtained by encapsulation.
- wherein the second peripheral seal is flush with the outer face of the first substrate.

Johnson et al. discloses a sealant composition for use with motor vehicle windshields (See Abstract)

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- wherein the glazing assembly further comprises a second peripheral seal in contact with the edges of the substrates.
- wherein the first and second peripheral seals are formed by extrusion or obtained by encapsulation.
- wherein the second peripheral seal is flush with the outer face of the first substrate.

(See Fig. 8, the seal encapsulates and is in contact with the edges of the windshield. Also see Fig. 7, the seal is flush with both outer faces of the windshield.)

The use of produce-by-process limitations has been noted in Claim 13, such as, for example, “seals are formed by extrusion or obtained by encapsulation.” While Johnson et al. **does** in fact teach these processes to produce seals, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated in Thorpe, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.).

The inventions of both Giron et al. and Johnson et al. are drawn to the field of windshields and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have included the sealant of Johnson et al. with the assembly of Giron et al. for the purposes of installing the windshield in the vehicle for which it is intended to reside.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571)270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gwendolyn Blackwell/
Primary Examiner, Art Unit 1794

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